

UNO-2372G

Intel Atom/Celeron Small-Size Modular Box Platform with 2 GbE, 4 USB, 4 COM, 2 mPCIe, HDMI, DP

NEW



Single-stack

Double-stack



Features

- Intel® Atom E3845; Celeron® J1900/J3455 quad-core processor with 4G DDR3L memory
- Compact, robust, fanless and cable-free system with high stability
- 2 x GbE, 4 x USB, 4 x RS-232/422/485, 1 x HDMI, 1 x DP
- Modular design with optional second stack for increased functionality
- Stand mount with rubber stopper
- Optional kit for DIN-rail and VESA mounting
- Optional Wi-Fi/Bluetooth/cellular connectivity
- Built-in TPM2.0 for hardware-based security(Intel Celeron only)

Introduction

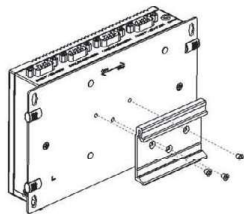
Advantech's new generation UNO-2000 series of Embedded Automation Computers are a highly ruggedized fanless and modular design. The incredible modularity of UNO-2372G offers numerous performance and cost-saving advantages, including elimination of unnecessary features and expenses, accelerated production and delivery, rapid deployment and integration, reduced system downtime and maintenance costs, and support for future upgrades and expansion. The UNO-2372G's modular design features optimized I/O and an optional second expansion stack that support Advantech's iDoor technology. This allows the platform functionalities to be easily extended and customized with the integration of various iDoor modules, including industrial Fieldbus, wireless communication, I/O and peripheral module, to provide purpose-built, future-proof solutions that satisfy specific application requirements.

Specifications

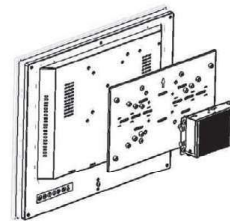
System Hardware	Processor	Intel® Atom Quad Core E3845 1.91GHz	Intel® Celeron® Quad Core J1900, 2GHz	Intel® Celeron® Quad Core J3455 1.5 GHz (max. turbo 2.3 GHz)	
	Memory	Built-in 4GB DDR3L 1333MHz (Up to 8GB)			Built-in 4 GB DDR3L, 1866 MHz (Up to 8 GB)
	Graphics Engine	Intel HD Graphics			Intel HD Graphics 500
	Ethernet	Intel® i210 GbE, 802.1Qav, 802.1AS, 802.3az			
	Hardware Security	TPM2.0			
	Storage	1 x mSATA shared with mPCIe socket 1 x 2.5" SATA HDD drive bay (Max. height 9.5 mm)			
	Expansion	2 x Full size mPCIe slots			
	Bios	AMI UEFI (64 Mbit)			
I/O Interfaces	Watchdog Timer	Programmable timer with 255 intervals (1 ~ 255 sec)			
	LED Indicators	Power, RTC battery, LAN (active, status), and HDD			
	Serial Ports	4 x RS-232/422/485, DB9, 50 ~ 115.2kbps			
	LAN Ports	2 x RJ45, 10/100/1000 Mbps IEEE 802.1u 1000BASE-T Fast Ethernet			
	USB Ports	1 x USB 3.0, 3 x USB 2.0		4 x USB 3.0	
	Displays	1 x HDMI 1.4 (1920x1080@60Hz) 1 x DP 1.1 (2560x1600@60Hz)		1 x HDMI 1.4b (3840 x 2160 @30 Hz) 1 x DP 1.2 (3840 x 2160 @60 Hz)	
	Power Connector				
General	Certification	CE, FCC, UL, CCC, BSMI			
	Dimensions (W x D x H)	Single stack: 150 x 105 x 35mm Double Stack: 150 x 105 x 65mm			
	Form Factor	Small Size			
	Enclosure	Aluminum Housing			
	Mounting	Stand, wall, VESA (optional), DIN rail (optional)			
	Weight(Net)	Single-stack model: 0.8 kg (1.8 lb) Double-stack model: 1.0 kg (2.2 lb)			
	Power Requirement	10 ~ 36 V _{DC}			
	Power Consumption	30W (Typical), 42W (Max)		18.36W (typical)	
Environment	OS support	Microsoft® Windows 7, Windows 10, Advantech Linux (Ubuntu 18.04/20.04)		Microsoft® Windows 10, Advantech Linux (Ubuntu 18.04/20.04)	
	Operating Temperature	-20 ~ 60°C (-4 ~ 140°F) @ 5 ~ 85% RH with 0.7m/s airflow			
	Storage Temperature	-40 ~ 85 °C/-40 ~ 185 °F			
	Relative Humidity	10 ~ 95% RH @ 40°C, non-condensing			
	Shock Protection	Operating, IEC 60068-2-27, 50G, half sine, 11ms			
	Vibration Protection	Operating, IEC 60068-2-64, 2Grms, random, 5 ~ 500Hz, 1hr/axis (mSATA) Operating, IEC 60068-2-64, 0.75Grms, random, 5 ~ 500Hz, 1hr/axis (HDD)			
	Ingress Protection	IP40			

Installation Scenario

DIN-rail Mount Illustration



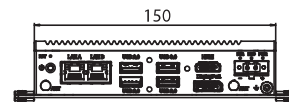
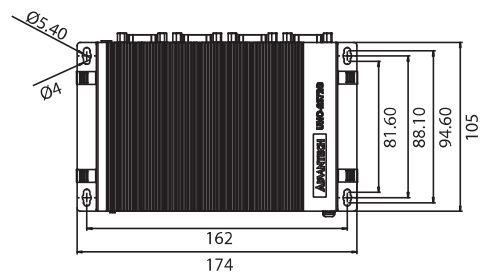
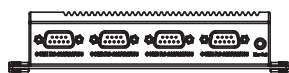
VESA Mount Illustration



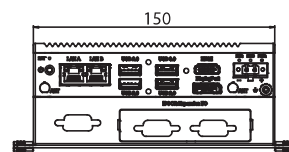
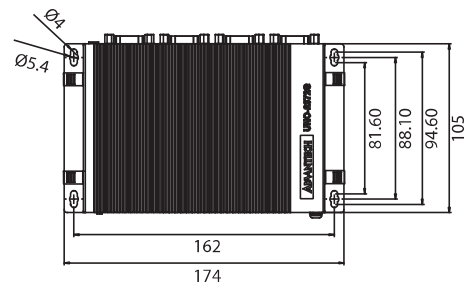
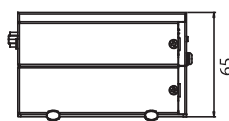
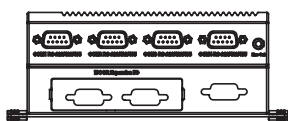
Dimensions

Unit: mm

Single Stack

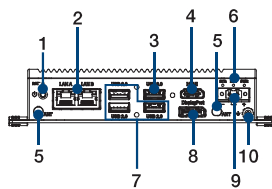


Dual Stack

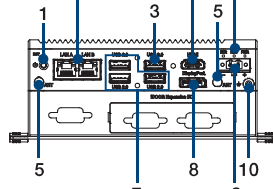


Front I/O View

Single Stack



Dual Stack

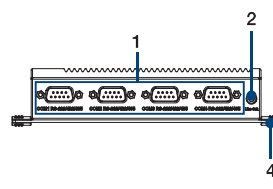


1. Power Button
2. RJ45 LAN
3. USB
4. HDMI
5. Reserved Antenna

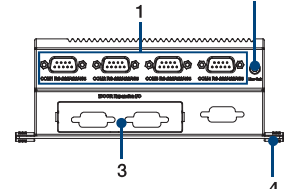
6. BTR, HDD & PWR LED Lights
7. USB
8. DisplayPort
9. Power Connector
10. Chassis Grounding

Rear I/O View

Single Stack



Dual Stack



1. RS-232/422/485
2. Line Out

3. iDoor Expansion Slot
4. Rubber Stopper

Ordering Information

Ordering Part Number	CPU	iDoor	Audio	USB	COM	LAN	Manufacture site
Single Stack	UNO-2372G-E021AE	X	Intel® Atom E3845	4	4	2	Taiwan
	UNO-2372G-J021AE		Intel® Celeron J1900				China
	UNO-2372G-J121AE		Intel® Celeron J3455				China
	UNO-2372G-J121AO						China
	UNO-2372G-J121AU						Taiwan
UNO-2372G-J121AOU	Taiwan						
Double Stack	UNO-2372G-E022AE	2	Intel® Atom E3845	4	4	2	Taiwan
	UNO-2372G-J022AE		Intel® Celeron J1900				China
	UNO-2372G-J122AE		Intel® Celeron J3455				China

iDoor Modules

iDoor modules are supported by UNO-2372G-E022AE, UNO-2372G-J022AE, UNO-2372G-J122AE (UNO-2372G-E021AE, UNO-2372G-J021AE, UNO-2372G-J121AE can also support iDoor modules by adding 2nd stack extension kit UNO-2372G-EKBE)

- **PCM-24D2R2-BE** 2-port isolated RS-232 mPCIe, DB9
- **PCM-24D2R2-BE** 2-port isolated RS-422/485 mPCIe, DB9
- **PCM-24D4R2-BE** 4-port non-isolated RS-232 mPCIe, DB37
- **PCM-24D4R4-BE** 4-port non-isolated RS-422/485 mPCIe, DB37
- **PCM-26D2CA-AE** 2-port isolated CANBus mPCIe, CANopen, DB9
- **PCM-27D24DI-AE** 24-channel isolated digital I/O with counter mPCIe, DB37
- **PCM-24R1TP-BE** 1-Port Gigabit Ethernet, Intel® i225, mPCIe, RJ45
- **PCM-24S2WF-CE** WiFi 802.11 ac/a/b/g/n 2T2R w/Bluetooth 4.1
- **PCM-24R2GL-AE** 2-port Gigabit Ethernet, mPCIe, RJ45
- **PCM-24S34G-ABE** LTE/HSPA+/GPRS, mPCIe, antennas for EMEA/APAC
- **PCM-24S34G-EBE** LTE/HSPA+/GPRS, mPCIe, antennas for US
- **C-PCM-24S24G-4AV-1** MultiTECH iDOOR, LTE Cat 4 (AT&T/Verizon), antenna

Optional Accessories

- **96PSA-A60W24T2-3** A/D 100 ~ 240V 60W 24V C14 cord end terminal power adapter
- **1702002600** Power cable, US plug, 1.8 m (industrial grade)
- **1702002605** Power cable, EU plug, 1.8 m (industrial grade)
- **1702031801** Power cable, UK plug, 1.8 m (industrial grade)
- **1700000596** Power cable, China/Australia plug, 1.8 m (industrial grade)
- **UNO-2000G-DMKAE** UNO-2000 DIN-rail kit
- **UNO-2000G-VMKAE** UNO-2000 VESA mount kit
- **UNO-2000-LKAE** Cable locking kit, 10 units per pack
- **UNO-REPWR-AE** Remote power and reset control kit for UNO (only support on UNO-2372G-J1xxAE)
- **UNO-2372G-VEGA330** UNO-2372G 1st stack bottom plate for VEGA-330

Embedded OS

UNO-2372G-E0xxAE

- **20703WE7PS0002** WS7P X64 MUI V4.18 B007 image
- **20703WX9ES0025** WIN10 2019 LTSC v6.05 B016 image
- **20703LEB1S0113** Image AdvLinuxTu V2.1.3 (Ubuntu 18.04)
- **20704U20DS0001** Image AdvLinuxTu V3.0.4 (Ubuntu 20.04)

UNO-2372G-J0xxAE

- **20703WC70S0035** WEC7 MUI V4.02 B117 image
- **20703WE7PS0019** WS7P x64 MUI V4.19 B009 image
- **20703WX9ES0025** WIN10 2019 LTSC v6.05 B016 image
- **20703LEB1S0113** Image AdvLinuxTu V2.1.3 (Ubuntu 18.04)
- **20704U20DS0001** Image AdvLinuxTu V3.0.4 (Ubuntu 20.04)

UNO-2372G-J1xxAE

- **20703WX9ES0030** Img W10LTSC V6.05 B028 UNO-2372G-J1xxAE Entry
- **20703LEB1S0113** Image AdvLinuxTu V2.1.3 (Ubuntu 18.04)
- **20704U20DS0001** Image AdvLinuxTu V3.0.4 (Ubuntu 20.04)